



AN EXAMINATION OF STRUCTURAL SURVEYING PRACTICE IN PROPERTY MANAGEMENT IN IBADAN METROPOLIS

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Abstract: The paper examines structural surveying practice in property management in Ibadan metropolis. Primary data were sourced from Estate Surveying and Valuation firms sampled through structured questionnaires. The total numbers of questionnaires administered to all the respondents were fifty three (53) while total numbers of completed questionnaires retrieved were forty two(42) representing 79.2% response rate. The data were analyzed with descriptive statistics. The study established that majority of the respondents did not incorporate structural survey in property management functions. The major method adopted for structural survey is the physical inspection of the property on two years basis while the purpose is to determine the extent of repairs and maintain the value of the property. Various defects are usually detected during structural survey. The study recommended that all estate surveyors and valuers who specialize in property management should incorporate structural survey in property management services which should be done yearly while training of the concerned personnel should also be embarked upon. Prompt attention should be paid to the repair of any defect detected during such structural survey.

Key words: Property, Defects, Repair, Value, Structural Survey.

1.0 INTRODUCTION

Many building erected in the last forty years or below are already displaying structural defects. The conservation of historic buildings presents quite different problems, refurbishment often requires a balancing act between owner demands and health and safety regulations, materials and their suitability for construction is another field requiring a degree of expertise. After the construction of buildings, most property owners tend not to care for it again as all that matters to them is that they have a property which they can call their own. This is because most property owners in Nigeria lack maintenance culture. However, the effective management of properties is very important due to its nature and the capital involved in its construction. Properly managed properties will not only maximized the income realizable from the property where the property is built for investment purpose but will also ensure that the property is in a good physical and structural state for it to continue performing the purpose for which it was built.

Structural surveying practice is an aspect of property management which relates to the ability of the building surveyor to inspect, survey, determine and update the status of the building structures, defects and dilapidation either major or minor in order to ascertain the building condition whenever it is being vacated by one occupier and before occupation by another tenant. (Sarah, Sara and Pat 2003); Each building components has its own maintenance and environmental profile with distinct opportunities for improvement in term of management, repair and maintenance. Because of the critical role structure plays in a building, the conventional performance parameters of function and durability are particularly important from maintenance, management and environmental perspective (.Building and Construction Authority 2012). Of all building components, structural elements are the most difficult to repair or replace. (Athena, 2001). So if they are not built for longevity, the entire building may need to be prematurely replaced, causing extra cost and trouble for the owner. This therefore explains why there is growing

recognition of the need to consider building and built assets on the basis of the whole life performance. The issues associated with maintaining and enhancing a sustainable property management which demand specialized skills and input. Building surveyors ability to add value to application of specialized skills sets that include a detailed understanding of building performance and use.

Premise on the above background, the paper aim at examining the structural surveying practice in property management within Ibadan metropolis vis a vis estate surveying and valuation firms with a view to determining the need, purpose and methods of structural surveying practice. Relevant questions that may agitate the mind of practitioners such as; whether structural survey should be carried out or not? Of what purpose is structural survey being carried out? What method should be adopted in carrying out the exercise? What are the common building structures in residential and commercial properties? What are the likely defects recorded in structural survey would be asked and provided with solution in the course of this study.

1.1 Structural Survey in Property Management.

Property management is the direction; the nursing and sometimes the overall control of policy of an interest in landed property with a view to obtaining maximum returns which may be financial, social prestige, power or some other goals or group of goals (Thoncroft, 1976). It emphasizes the need to economize the use of resources and time so that the predetermined objectives are achieved. According to Douglas (1976), "property management seeks to control property interests having regard to the short and long term objectives of the estate owner and particularly to the purpose for which the interest is held; to negotiate rent reviews and lease renewals, to oversee physical maintenance and enforcement of lease covenants, to be mindful of the necessity of upgrading and merging interests where possible, to recognize opportunities for the development of potential and to fulfill the owner's legal and social duties to the community". Also in the view of Kuye, (2008), property management consists of three separate components which are: servicing, rectification and replacement. Similarly, Sarah et al (2003) were of the opinion that property management is the application of skill in the caring for a property, its surroundings and amenities, in developing a sound relationship between a landlord and a tenant, and between tenants, so that the property may give its fullest value to both the tenant and the property owner (landlord).

Wikipedia (2000), property management is the operation of commercial and/or residential real estate and that its functions are 'akin to the role of management in any business.' Sangosanya (1986) opined that property management is both "professional and business" merged together; profession because it involves the acquisition of knowledge and special skills in a particular field of endeavor. In this case property management is business because it is about the management of resources for the achievement of a set goal and objectives while Tomori (1997) viewed property management as another business

enterprise that is mainly concerned with correct motivation of staff and fairness to tenants by consulting, informing and encouraging them so that a sense of partnership and joint venture is established.

The field of property maintenance is one of the most challenging aspects of property management. It requires good knowledge of construction and the technical knowledge of the maintenance work. Kuye, (2008) asserted that property concerned may range from a simple residential, detached bungalow to a high rise office complex. For the property manager, every property management brief broadens his ideas and experience because of the uniqueness of challenges often faced in their day-to-day activities. Furthermore, not only are the types of property different, but the technicalities and the maintenance approach can vary from one assignment to the other; and not forgetting the different levels of sense of responsibility/lease agreement compliance – all these characteristics present their unique challenges which the property manager cannot run away from. Professionals such as civil Engineer, structural Engineer, Estate Surveyor, Building Surveyor e.t.c. carry out many types of inspection survey, each for a particular reason and each resulting in a report with specific information produced for a particular purpose.

The focus of this study is therefore the structural survey carried out by estate surveyors and valuers in line with visible and accessible building components. The term structural survey has come into common use to describe a survey which covers all visible and accessible parts of a building, including those which are not part of the structure such as the roof covering, windows and drains (UNICEF2006). The term structured survey is interchangeably used with investigation, appraisal and assessment. Building and Construction Authority (2012) define structural survey as a survey carried out by a chartered civil or structural engineer to assess the building for signs of structural distress and movement and to prepare a report on the structural integrity of the building. At the same time, general comments on the building will be noted. The under listed are identified by Athena, (2001) as structural components of a home; roof, walls, floors, ceiling, windows, doors foundation, basement and stairs. However, the common defects usually recorded during structural survey in residential and commercial properties as identified by Zarita, Sharu, and Madya (2004), usually include the following;

Dampness: - Damp penetration is one of the most serious defects in buildings. It causes deterioration of the structure and also results in damage to furnishings and contents of the building. It can also affect the health of the occupant.

Roof Leakage: - This is one of the commonest defects complained of by the occupier. Apart from causing considerable inconvenience to the users, it can use to the accelerated deterioration of the other parts of the buildings such as ceilings, floors and walls, and can cause serious damage to decoration and electrical installations.

Cracks: - These are generally caused by tensile stresses in excess of the tensile strength of the materials, produced by externally applied loads or internal movements arising from temperature or insulation, all of which result in reduced efficiency of the building.

Efflorescence: - This consists of deposits of soluble salts formed on the surface of new brickwork, and it usually

appears as white powder or as feathery crystals, or more occasionally as a hard glossy deposit penetrating the brick faces. It can occur on internal as well as external surfaces, causing damage to decoration where applied before the walls have dried out.

Painting defects: - Decorations enhance the appearance of buildings and in many cases also protects materials which would otherwise deteriorate. Common defects in painting are flaking and peeling of paints which give the property a shabby appearance and make it unsightly and unacceptable to the occupants.

Plumbing defects: - Plumbing defects are also one of the major defects in buildings. Leaking taps waste water and are a nuisance. Burst pipe leaks water into the walls or floors and cause dampness on the property. Plumbing defects are very destructive to the building if not attended to on time.

1.2 Coverage of visual inspection

Property manager and building owners often question the expected coverage of a visual inspection. Owing to difficulties of access and other practical problems, it is sometimes not possible to inspect 100% of all areas in a building within a reasonable period of time (Susan 1987). The danger of prescribing any percentage lowers than 100% is the possibility of doing the minimum, with the possible consequence of missing something important (AGCAS Surveying, 2001). It is therefore generally expected that the property manager carry out the visual inspection of all units or areas of a building. This is especially so for buildings where the imposed loading is high, usage varied or likely to be subjected to abuse or overloading, for example factories, industrial buildings, warehouses, shop houses, public assembly areas, etc. For other buildings where the imposed loading is light, usage is fairly uniform and unlikely to be subjected to overloading (such as residential apartments, hotel rooms, general office areas), or if a reduced percentage of coverage is inevitable, the property manager must have the inspection sampling well distributed throughout the building and no significant defect or deterioration is found during his inspection of the sample. If the property manager foresees the possibility of abuse or overloading and detects signs of significant structural defects and possible deterioration, he should consider 100% inspection of the structure.

All parts of a building with special and critical structure elements or with no redundancy (e.g. transfer girder, slender columns, cantilever structure, long span structures, connections and support conditions, etc.) must be expected fully.

1.3 Research methodology

The study was conducted in Ibadan, Oyo state and the focus group of this research work was mainly the firms of Estate surveying and valuation practicing in Ibadan. The total number of registered practicing firms of Estate Surveying and Valuation in Ibadan were fifty three (53) as obtained from Oyo State branch of the Nigerian Institution of Estate Surveyors and Valuers register. The total numbers of

questionnaires administered to all the respondents were fifty three (53) while total numbers of completed questionnaires retrieved were forty two(42) representing 79.2% response rate. The study employed descriptive statistical methods of data analysis. These comprise frequency distribution and cross tabulation. The frequency distribution shows the basic distributional features of the data on the respondents Estate Surveyors and their respective firms. In addition, the study adopts summated-rating scale also known as linkert scale which is one of the most widely used scaling techniques in research (Churchill & Brown, 2007) and is particularly useful because it allows respondents to express the intensity of their feelings. Using scale 1 – 5 for strongly disagree, disagree, undecided, agree and strongly agree respectively. Responses are assigned scale value and a total score is calculated for each question or calculating the percentage of each total score across respondents. All the fifty three (53) practicing firms of Estate Surveying and Valuation in Ibadan were addressed with structured questionnaires. A total number of forty two questionnaire were retrieved which represent 79% of the total questionnaires distributed. This therefore forms the basis of analysis of the study

1.4 Data Analysis and Discussion

The main aim of this study is to examine structural surveying practice in property management from the perspective of estate surveyors and valuers, thus, related questions were posed to the respondents as regards the objective as well as the characteristics of the sample firms and the responding estate surveyor and valuers. Responses from these questions were analysed and discussed in this section.

Table 1: Years of Establishment of firm

Year	Frequency	Percentage
Between 1-5yrs	6	14.3
Between 6-10yrs	9	21.4
Between 11-15yrs	11	26.2
Between 16-20yrs	9	21.4
Above 20yrs	7	16.7
Total	42	100

Source: Field survey 2015

Tale 1 shows that the age group of the sampled firms were well spread having 14.3%, 21.4%, 26.2%, 21.4%, and 16.7% respectively. This further indicates that there are old and new firms of estate surveying and valuation that are involved in property management and structural surveying practice as indicated in the Table. This implies that the respondents of the firms are well aware of the development in the field of property management, and therefore enhance the reliability of the data.

respondents sampled. This implies that structural survey is not being seeing as an integral part of property management

Table 2: Years of Establishment of firm

Professional Practice	Yes	No
Property Management		
Estate Agency		
Property Valuation		
Property Development		
Facility Management		

Source: Field survey 2015.

Considering the Table 2 above on individual basis indicates that 90.5% of the firm’s samples engaged in property management, 85.7% in estate agency and 100% in property valuation. 42.9% and 35.7%, 90% for property development and facility management respectively. Apart from the fact that each of the firm has more than one area of professional practice, the table also indicate that the sampled firms are very relevant to the study and which enhanced the dependability of the data supplied.

Table 3: Academic and Professional Status of respondents Estate Surveyor and Valuers

Academic Qualification	Frequency	Percentage
Higher National Diploma	17	40.5
Bachelor’s Degree	20	47.6
Master’s Degree	4	9.5
Doctorate Degree	1	2.4
Total	42	100

Professional Qualifications

ANIVS	34	81.0
FINVS	8	19.0
TOTAL	42	100

Source: Field Survey 2015.

Table 3 shows that significant large majority of respondents possess either HND or B.SC in Estate Management. HND 40.5% and B.Ss 47.6%. This makes the data more dependable. In addition all the respondent Estate Surveyor and Valuers are members of professional body (the Nigerian Institution of Estate Surveyors and Valuers) with different membership grade. Associate has 81% while Fellow has 19%, all these further enhance the reliability of the data

Table 4: Respondents Opinion on whether they carried out structural survey or not

Opinion of Respondents	Frequency	Percentage
Yes	15	35.7
No	27	64.3
TOTAL	42	100

Source: Field Survey, 2015

The response in the Table indicates that structural survey of building is not being carried out by majority of the

Table 5: When do you carry out structural survey in building?

Period	Frequency	Percentage
Annually	4	9.5
Quarterly	0	0
Not at all	27	64.3
Bi annually	11	26.2
Total	42	100

Source: Field survey 2015

Table 5 presents the various periods in which structural survey in building could be carried out. Although it has been established in Table 4 that majority of respondents do not carry out structural survey. However, Table 5 shows that few that have been carried it out have been doing so on the basis of 2 years interval. This portends that priority is not attached to carrying out structural survey in building by the respondents.

Table 6 analyses various methods used in carrying out structural survey in building in order to determine the most appropriate method for the exercise. Out of the three methods sampled, regular/physical inspection has 54.8% while information from tenant and landlord have 40.5%, and 4.8% respectively. This shows that regular/physical inspection of the property is mostly used in practice over other methods.

Table 6: Methods used in carrying out structural survey

Methods	Frequency	Percentage
Regular/physical inspection	23	54.8
Through information from tenant	17	40.4
Through information from landlord	2	4.8
TOTAL	42	100

Source: Field survey 2015

Table 7: Respondents opinion on the purpose and the need for structural survey in building

Purpose of structural survey	S.A Strongly Agree (3)	A-Agree (4)	U- Undecided (3)	D- Disagree (2)	SD- Strongly disagree (1)	Value of rating	%
To maintain the value of property	20(100)	19(36)	2(6)	4(8)	9(9)	159	75.7
To prevent damages of building components	15(75)	10(40)	4(12)	5(10)	8(8)	145	69.0
To ensure longevity of the property	14(70)	9(36)	3(9)	6(12)	10(10)	137	65.2
To determine extent of repairs in the property	13(65)	8(32)	4(12)	7(14)	10(10)	133	63.3
To determine firm’s future policy on such property	5(25)	7(28)	1(3)	11(22)	18(18)	96	45.7

Source: Field Survey, 2015

The scenario in Table 7 above reflects the purpose and the need for structural survey in building. The table shows that all purposes itemized in the table are the reasons why structural survey is carried out in building but at different rate. Value of rating for maintaining the value of property has the highest of 159(75.7%) and followed by prevention of damages of building components which has 145(69%).

137(65%) goes for ensuring longevity of the property while 133(63%) goes for determining the extent of the repairs of the property. The positive responses of strongly agree and agree signify that all the purposes tested are in line with structural survey in building except that of firm’s future policy on such property which has a rating below average.

Table 8: The respondents were asked to determine the building structures components that are of major concern to them in structural survey exercise.

Building structure/component	SA-strongly Agree (5)	A-Agree (4)	U-Undecided (3)	D-Disagree (2)	SD-strongly disagree (1)	Value rating	%
Building service	30(150)	2(8)	1(3)	3(6)	6(6)	173	82.4
Doors and windows	22(110)	8(32)	4(12)	4(8)	4(4)	166	79.0
Wall	16(80)	12(48)	3(9)	5(10)	6(6)	153	72.9
Floor	8(40)	17(68)	5(15)	7(14)	5(5)	142	67.7
Ceiling	12(60)	8(32)	8(24)	9(18)	5(5)	139	66
Roof	9(55)	6(24)	4(12)	13(26)	10(10)	127	60.5

Source: Field Survey 2015.

From Table 8 above, building service is highest with summated rating of 173 out of possible maximum of 210. By implication, building service is of major concern to the property manager when a structural survey is conducted. Other highly rated building components that are of major concern are doors and windows, wall and floor with the rating of 166,153 and 142 respectively. It is evident from the above Table that all the highlighted building components are of major concern to the respondents since all of them have a summated rating that is above average out of the maximum possible value of 210. This shows that all the building components are covered during inspection but at different level.

Table: 9 Respondents opinion on the occurrence of building defects.

Defects	S-A Strongly Agree (5)	A- Agree (4)	U- Undecided (3)	D- Disagree (2)	SD- Strongly disagree (1)	Value of rating	%
Plumbing defects	22(110)	10(40)	0(0)	4(8)	6(6)	164	78.0
Painting defect	18(90)	9(36)	2(6)	9(18)	4(4)	154	73.3
Roof leakage	11(55)	13(52)	4(12)	8(16)	6(6)	142	67.6
Crack	20(80)	5(20)	1(3)	3(6)	13(13)	122	58.1
Efflorescence	6(30)	9(36)	5(15)	6(12)	16(16)	109	51.9
Dampness	5(25)	3(12)	2(6)	12(2)	20(20)	87	41

Source: Field Survey 2012.

Table 9 captures the extent at which various defects occurs in building. It is obvious from the table that all the defects stated in the table 11 usually occur in building but at different rate. The outcome of the analysis shows that plumbing defects occur more than any other and its value of rating is the highest with 164(78%) out of the maximum possible value of 210. The frequent occurrence of these defects may be occasioned by the wear and tear of the plumbing materials.

Next to plumbing defects is the painting defect which has a value rating of 154(73.3%) of the maximum possible value. This may occur as a result of expiration of the paint, effect of water and scrubbing of the wall. Likewise, roof leakage and crack has 142(67.6%) and 122 (58.1%) respectively, indicating that both occur as a defect in building and are usually discovered when structural survey is carried out. Efflorescence is another common defects in building which may occur if the wall is not dried off properly before painting. Its value of rating is 109(51.9%) meaning that it occurs in building on occasional basis. Dampness seldomly occur in building that is closer to the source of water. Its value of rating as 87(41%) indicating a low level of occurrence in building.

1.5 CONCLUSION AND RECOMMENDATIONS

This paper empirically examines the practice of structural surveying in property management in Ibadan metropolis. The findings of the study reveals that majority of the respondents did not incorporate structural survey as an essential function to be performed in property management. The major method adopted for this exercise is the physical inspection of the property and which is done on bi annual basis although information on such exercise may be supplied by tenants and perhaps landlord. The

purpose of structural survey was equally examined in the study and this includes; maintaining the value of the property, prevention of damages of building components/structures, to determine the extent of repairs and for ensuring longevity of the property. All these purposes indicated a positive response of 60% and above which imply that they are all relevant for the exercise. The study reveals that there are various defects usually detected during structural survey such as plumbing defects, painting defects, roof leakage, crack, efflorescence and dampness while building services constitute major concern of respondents in structural survey.

It is however recommended that all estate surveyors and valuers who specialize in property management should incorporate structural survey as an integral aspect of property management. It is further recommended that structural survey should be done on annual basis while training of the concerned personnel should also be embarked upon. This will ensure efficient, effective and successful property management. More attention is also expected to be paid to plumbing, painting roof leakage, crack and other building services by the property managers because defects are frequently recorded in these building components.

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